

UNCLASSIFIED

EXHIBIT R-2, FY 2001 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2000

BUDGET ACTIVITY: 7

PROGRAM ELEMENT: 0207161N

PROGRAM ELEMENT TITLE: TACTICAL AIR INTERCEPT

(U) COST: (Dollars in Thousands)

<u>Project Number & Title</u>	<u>FY 1999 Budget</u>	<u>FY 2000 Estimate</u>	<u>FY 2001 Estimate</u>	<u>FY 2002 Estimate</u>	<u>FY 2003 Estimate</u>	<u>FY 2004 Estimate</u>	<u>FY 2005 Estimate</u>	<u>To Complete</u>	<u>Total Program</u>
E0457 AIM-9X	57,066	39,830	21,705	13,885	1,859	693	1,334	0	264,632
TOTAL	57,066	39,830	21,705	13,885	1,859	693	1,334	0	264,632

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The AIM-9X Sidewinder program is a joint USN/USAF effort to continue the evolutionary development of the AIM-9 missile. The AIM-9X is the long-term evolution of the AIM-9 that will provide a series of modifications to the AIM-9 improving seeker/guidance and kinematic performance and will be fielded in the post-2000 timeframe. Funding for AIM-9X activities beyond FY 1994 is provided equally by the USN and USAF in total. The test articles are developmental assets for proving missile performance in support of the Low Rate Initial production (LRIP) Defense Acquisition Board (DAB) and MS III decisions, and are delivered in the indicated fiscal years.

As of January 2000, the program has already demonstrated capabilities (through a combination of captive carry flights 7 separation control test flights and 3 guided live fire shots) beyond those of the current US fielded AIM-9M short range missiles. Joint USN and USAF warfighters have emphasized the need to aggressively field the AIM-9X capability to counter the already fielded and superior enemy air-to-air capabilities.

(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under OPERATIONAL SYSTEMS DEVELOPMENT because it encompasses engineering and manufacturing development for upgrade of existing, operational systems.

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EXHIBIT R-2a, FY 2001 RDT&E,N BUDGET PROJECT JUSTIFICATION SHEET

DATE: February 2000

BUDGET ACTIVITY: 7

PROGRAM ELEMENT: 0207161N

PROJECT NUMBER: E0457

PROGRAM ELEMENT TITLE: TACTICAL AIR INTERCEPT

PROJECT TITLE: AIM-9X

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 1999 BUDGET	FY 2000 ESTIMATE	FY 2001 ESTIMATE	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
E0457 AIM-9X	57,066	39,830	21,705	13,885	1,859	693	1,334	0	264,632
RDT&E,N Articles	1	6	8	11					26

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The AIM-9X Sidewinder program is a joint USN/USAF effort to continue the evolutionary development of the AIM-9 missile. The AIM-9X is the long term evolution of the AIM-9 that will provide a series of modifications to the AIM-9 improving seeker/guidance and kinematic performance which will be fielded in the post-2000 timeframe. Funding for AIM-9X activities beyond FY 1994 is provided equally by the USN and USAF in total. The test articles are developmental assets for proving missile performance in support of the LRIP DAB and MS III decisions, and are delivered in the indicated fiscal years.

(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under OPERATIONAL SYSTEMS DEVELOPMENT because it encompasses engineering and manufacturing development for upgrade of existing, operational systems.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 1999 ACCOMPLISHMENTS: (Navy Share Only)

- (U) (\$27,300) Continued EMD efforts.
- (U) (\$9,110) Continued providing aircraft interface support to the EMD contractor. Aircraft interface verified through captive aircraft OFP flights, hardware interface and conducting initial separation guided tests. Incorporated the results of wind tunnel test for missile/platform interface and compatibility efforts.
- (U) (\$15,969) Continued EMD contractor monitoring, continuing DT-IIB, started DT-IIC (Guided Launches), Operational Test-IIA (OT-IIA) Captive Carry Flights, and provided consulting services support.

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- (U) (\$1,917) Headquarters/field travel performed.
- (U) (\$2,770) Continued digital upgrade to LAU-7 launcher.

2. FY 2000 PLAN: (Navy Share Only)

- (U) (\$19,635) Continue EMD efforts.
- (U) (\$1,320) Continue to provide aircraft interface support to the EMD contractor in support of OT-IIA, DT-IIC/DT-IID (Launches) and complete OT-IIA and delivery of Production Representative Test Articles.
- (U) (\$13,292) Continue providing Government flight test support through implementation of DT-IIC/OT-IIA and Captive Carry Reliability Flight Program and Government engineering support to the EMD activities.
- (U) (\$5,387) Provide for consulting services, technical engineering, and management support.
- (U) (\$196) Headquarters travel.

3. FY 2001 PLAN: (Navy Share Only)

- (U) (\$10,095) Continue EMD efforts to include completion of DT-IIC and start of DT-IID (TECHEVAL).
- (U) (\$7,660) Continue providing government flight test support through implementation of DT-IID and DT assist with operational testers.
- (U) (\$3,822) Provide for consulting services, technical engineering, and management support.
- (U) (\$128) Headquarters travel.

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PROGRAM ELEMENT TITLE: TACTICAL AIR INTERCEPT **PROJECT TITLE: AIM-9X**

(U) B. PROGRAM CHANGE SUMMARY:

	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY2001</u>
(U) FY 2000 President's Budget:	64,626	40,051	17,503
(U) Appropriated Value:	65,855	40,051	
(U) Adjustments from PRESBUDG:	-7,560	-221	4,202
(U) FY 2001 President's Budget Submit:	57,066	39,830	21,705

CHANGE SUMMARY EXPLANATION:

(U) Funding: The FY 1999 reduction of \$7,560 thousand reflects a reduction of \$979 thousand for a SBIR assessment, a reduction of \$1,000 thousand for a Below Threshold reprogramming (BTR) for emergent requirements, a reduction of \$2,200 thousand for a BTR for Integrated Defensive Electronic Countermeasures (IDECM), a reduction of \$2,607 thousand for a BTR for High Order of Language (HOL), a reduction of \$309 thousand for inflation savings, a reduction of \$439 thousand for higher Navy priorities and a reduction of \$26 thousand for payment of lapsed liability contracts. The FY 2000 decrease reflects a \$221 thousand reduction for an Across-the-Board recision. The FY 2001 net increase of \$4,202 thousand reflects an increase of \$4,597 thousand in the testing and contractor (Raytheon) efforts due to delays in flight test efforts attributable to a nine month delay of the Separation Control Test Vehicles (SCTV) and a four month delay of Engineering Development Model (EDM) launches as well as a net decrease of \$237 thousand due to Strategic Sourcing Plan savings and Navy Working Capital Fund (NWCF) adjustments, a increase of \$51 thousand for Military and Civilian Pay, a \$152 thousand decrease for revised economic assumptions and a \$57 thousand decrease for reprioritization of requirements within the Navy. The SCTV and EDM delays were caused by technical issues with the Control Actuation System (CAS) and the tracker's software problems.

(U) Schedule: Test article delivery schedule revised to reflect EMD schedule changes created by SCTV and EDM launch delays. The Test and Evaluation milestones of conducting Insensitive Munitions Test shifted from the 2nd Qtr of FY99 to the 4th Qtr FY99 and OT-IIB (OPEVAL) start shifted from the 3rd Qtr FY01 to the 1st Qtr FY02.

(U) Technical: Not applicable.

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(U) C. OTHER PROGRAM FUNDING SUMMARY: (Dollars in thousands):

<u>APPN</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>TO COMPLETE</u>
Qty	0	63	157	283	298	291	3908
WPN-Mod	0	27,532	42,816	60,945	62,179	64,455	861,705
-Spares		759	1,042	1,051	895	989	

(U) RELATED RDT&E:

(U) DA PE 0603715D (AIM-9 CONSOLIDATED PROGRAM)

(U) AF PE 0207161F (TACTICAL AIM MISSILE)

(U) D. ACQUISITION STRATEGY: The Acquisition Decision Memorandum (ADM) dated December 3, 1996 approved program entry into Engineering and Manufacturing Development (E&MD). A contract with Hughes Missile Systems Company for E&MD was awarded December 13, 1996. Retrofitting of components will extend the operational effectiveness of existing inventories at an affordable cost while continuing evolution of the AIM-9 series. The E&MD contract is a Cost Plus Incentive Fee/Award Fee. In December 1997, Hughes Missile Systems Company became Raytheon Missile Systems Company as a result of Raytheon's acquisition of Hughes. The EMD contract includes three Fixed Price Incentive Fee options for production, Low Rate Initial Production (LRIP) Lots 1, 2, and 3. These production options are planned to be exercised in FY01, FY02, and FY03. This reflects the FY00 Appropriations Act deferral of LRIP I funding.

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(U) E. SCHEDULE PROFILE:

	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>TO COMPLETE</u>
(U)Program Milestones		4Q/00 LRIP I DAB		3Q/03 MSIII*
(U)Engineering Milestones			1Q/01 TRR TECHEVAL	1Q/02 TRR for OPEVAL
(U)T&E Milestones	4Q/99-3Q/00 OT-IIA		2Q/01-4Q/01 DT-IID	1Q/02-1Q/03* OT-IIB
(U)Contract Milestones			1Q/01 LRIP I	1Q/02 LRIP II

* APB update approved in September 1999, a revision reflecting the deferral of FY00 procurement funding is in staffing within DOD. Deferral of the FY00 procurement funding is reflected in the MSIII and IOC/RAA dates.

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EXHIBIT R-3, FY 2001 RDT&E,N COST ANALYSIS

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PROJECT NUMBER: E0457

PROJECT TITLE: AIM-9X

<u>Cost Categories:</u>	<u>Contract Method</u>	<u>Performing Activity &</u>	<u>*Total Prior Yrs</u>	<u>FY 1999 Cost</u>	<u>FY 1999 Award Date</u>	<u>FY 2000 Cost</u>	<u>FY 2000 Award Date</u>	<u>FY 2001 Cost</u>	<u>FY 2001 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>**Target Value of Contract</u>
DEM/VAL	C/CPIF	Hughes Tucson AZ	6,685	0		0				0	6,685	22,600
	C/CPIF	Raytheon Bedford MA	8,587	0		0				0	8,587	24,900
EMD	C/CPIF/AF	Hughes Tucson, AZ	56,509	23,744	OCT 98	16,313	OCT 99	8,557	OCT 00	8,518	113,641	197,500
EMD Award Fee			5,250	3,556	JUL 99	3,322	AUG 00	1,538	NOV 01	230	13,896	13,896
Aircraft Integration	C/CPFF	Boeing St. Louis, Mo	13,967	9,110	OCT 98	1,320	OCT 99			234	24,631	
Engineering Services	WX	NAWCWD	26,237***	3,337	NOV 98	2,070	NOV 99	1,234	NOV 00	823	33,701***	
	WX	NAWCAD		1,022	NOV 98	1,615	NOV 99	1,225	NOV 00	578	4,440	
Miscellaneous I/H (Efforts <\$1.0M)	Various	Various	4,780	1,661	NOV 98	705	NOV 99	955	NOV 00	1,759	9,860	
LAU-7 Launcher	C/CPFF	Boeing St. Louis, Mo.	1,782	2,770	NOV 98						4,552	
Contract (P ³ I)	TBD	TBD								2,372	2,372	2,372
Subtotal Product Development			123,797	45,200		25,345		13,509		14,514	222,365	

Support Costs included in Management

Subtotal Support

0 0 0 0 0 0

Remarks:

Award Fee is 12% of the Target Cost and is broken into four increments (this will change as the contract value is revised). The first award fee period was applied in July 1998; the second was applied in Aug 1999.

*FY95 and prior funded under P.E. 0603715D. FY96 and out are funded under P.E. 0207161N. **Target Value includes both Navy and Air Force Funding. ***Prior Years include NAWCWD/NAWCAD.

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Exhibit R-3, Project Cost Analysis
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EXHIBIT R-3, FY 2001 RDT&E,N COST ANALYSIS

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PROJECT TITLE: AIM-9X

	Contract	Performing	Total		FY 1999		FY 2000		FY 2001		Target	
<u>Cost Categories:</u>	<u>Method & Type</u>	<u>Activity & Location</u>	<u>Prior Yrs Cost</u>	<u>FY 1999 Cost</u>	<u>Award Date</u>	<u>FY 2000 Cost</u>	<u>Award Date</u>	<u>FY 2001 Cost</u>	<u>Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Value of Contract</u>
Test & Evaluation	WX NAWCWD		*	6,499	Nov 98	12,013	Nov 99	7,818	Nov 00	2,718	29,048	
	WX NAWCAD			3,183	Nov 98	1,500	Nov 99	0		179	4,862	
Subtotal Test & Evaluation			*	9,682		13,513		7,818		2,897	33,069	
Remarks:												
Contract Engineering Support	ID/IQ, T&M	Endmark	2,750	1,402	Dec 98	0		0		0	4,152	4,152
		Arlington, VA										
	TBD	TBD				776	Dec 99	250	Dec 00	270	1,296	
Program Management Support	ID/IQ, T&M	NSM	1,088	320	Dec 98						1,408	1,408
Various Eng. Support Contracts	ID/IQ, T&M	Various		206	Dec 98						206	206
Travel	WX	PMA 259 IPT	625	256	Oct 98	196	Oct 99	128	Oct 00	90	1,295	
Subtotal Management			4,463	2,184		972		378		360	8,357	

Remarks:

Total Cost 128,260 57,066 39,830 21,705 17,771 264,632

*T&E Costs - prior years included in product development

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Exhibit R-3, Project Cost Analysis
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